

2 a compression chamber for compressing working fluid within an inside  
3 thereof;

4 a discharge port, through which the working fluid flows out from the  
5 compression chamber;

6 a valve seat portion provided around the discharge port and having tapered  
7 surfaces, so that a cross-sectional area of the discharge port increases in a direction  
8 away from the compression chamber;

9 a valve having a projection portion having a tapered surface, only a portion  
10 of which, in a closed position, is in contact with tapered surface of the valve seat  
11 portion to form a line contact between the valve and the valve seat portion; and

a retainer for positioning the valve on the valve seat portion.

12 2. (Amended) A compressor as defined in claim 1, wherein the valve has a  
flat surface portion provided at an end portion of the valve on the side of the  
compression chamber.

13 3. (Amended) A compressor as defined in claim 1, wherein the discharge  
port has a cylindrical portion provided between the compression chamber and the  
valve seat portion.

14 4. (Amended) A compressor, comprising:

15 a compression chamber including a cylinder and a piston for compressing  
16 working fluid therebetween;

17 an end plate for blocking an opening of the cylinder, the end plate including  
18 a discharge port provided therethrough, through which the working fluid flows out  
19 from the compression chamber;

20 a valve seat portion provided around the discharge port and having tapered  
21 surfaces, so that a cross-sectional area of the discharge port increases in a direction  
22 away from the compression chamber;

a valve having a projection portion having a tapered surface, at least a

portion of which, in a closed position is in contact with the tapered surface of the valve seat portion;

a bore provided the end plate, the bore being connected to the valve seat portion; and

a retainer inserted into the bore for holding the valve opposing to the valve seat portion.

5. (Amended) A compressor

OK as defined in claim 4, wherein the valve has a flat surface portion provided at an end portion of the valve on the side of the compression chamber.

6. (Amended) A compressor as defined in claim 4, wherein the retainer through which the working fluid is discharged includes an opening.

7. (Amended) A compressor

as defined in claim 4, wherein the discharge port has a cylindrical portion provided between the compression chamber and the discharge port with said valve seat portion.

8. (Amended) A compressor

as defined in claim 4, further comprising a passage provided between the retainer and an inner side surface of the bore for conducting the working fluid therethrough.

9. (Amended) A compressor, as defined in any one of the claims 1 to 8, further comprising:

a biasing means for supporting the valve, so that the valve is biased towards the closed position in contact with the tapered surface of said valve seat portion but can be forced out of contact with the tapered surface of the valve seat portion by pressure within the compression chamber.

10. (Amended) A compressor, as defined in claim 9, wherein biasing means is a coiled spring engaged with the valve, the coiled spring being formed nearly into

a conical shape.

A1 11. (Amended) A compressor, as defined in claim 9, wherein the biasing means is a leaf spring formed with slits for biasing the valve with a central portion thereof.

Please add the following new claims to the application:

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13. A compressor as defined in claim 1, wherein the tapered surface of the projection portion of said valve has a conical portion at an end closest to said compression chamber and a spherical portion adjacent the conical portion, wherein, in a closed position, a portion of the spherical portion contacts a portion of the tapered surface of said valve seat portion to form the line contact between said valve and said valve seat portion.

A2 13 12  
14. A compressor as defined in claim 13, wherein the tapered surface of the valve seat portion has a conical shape.

16  
15. A compressor as defined in claim 4, wherein the valve seat portion and the bore are coaxial.

14  
16. A compressor as defined in claim 1, wherein the tapered surface of the projection portion of said valve has a conical portion at an end closest to said compression chamber and a spherical portion adjacent the conical portion, wherein, in a closed position, a portion of the spherical portion contacts a portion of the tapered surface of said valve seat portion to form the line contact between said valve and said valve seat portion.